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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,568	09/29/2003	Ola Olofsson	TPP 30887A	4273
7590 04/28/2006			EXAMINER	
Stevens, Davis, Miller & Mosher, L.L.P. Suite 850 1615 L Street N.W. Washington, DC 20036			MACARTHUR, VICTOR L	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/671,568

Applicant(s)

OLOFSSON, OLA

Examiner

Victor MacArthur

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/14/2006 has been entered.

### ***Claim Objections***

Claim 26 is objected to because of the following informalities:

- Claim 26, which depends from claim 17, is a double inclusion of limitations previously recited in claim 17 (last paragraph of claim 17). Claim 26 recites no new limitations and should be canceled.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 6-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGath (U.S. Patent 5,344,700) in view of Martensson (U.S. Patent 6,101,778).

Claim 6. McGath discloses (fig.3) a joint between first and second boards (24a, 24a'), the joint comprising: a guiding means (tenon and groove) at a joint between the two boards; the boards each comprising an upper surface (42a, 43) and a core (41); the guiding means on at least one (24a') of the boards comprising a groove (56); the second board (24a) comprising a tenon (57); the tenon and the groove includes a first fitting clearance (between tip of 57 and 56) bound by an upper surface of the tenon and an upper surface of the groove; and, wherein at least the **tenon** includes a guiding wedge (58) so that a second, guiding fitting clearance (between 58 and 48) is positioned between the guiding wedge and the upper surface of the **groove**, whereby the first fitting clearance comprises a main part of a fit between the groove and tenon and the second guiding fitting clearance comprises a smaller part of the fit, provided that the first fitting clearance is larger than the second fitting clearance, wherein each of the boards further comprises a planar surface (planar contacting surfaces as seen in fig.4), and wherein the at least one guiding wedge comprises a distal tapered section (tapered section of 58 forming clearance) and a proximal section (section to left of 58 forming clearance) extending from the tapered section towards the core (core of 24a), and the planar surface of the at least one of the boards abuts a planar surface of the other adjacent board when the tenon of the board is mated with a groove of the other board. It appears that the first fitting clearance is in the range of 0.1-1mm, while the second, guiding fitting clearance is in the range of 0.01-.2mm. However, McGath does not expressly disclose these dimensions. It has generally been recognized that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re

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Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to optimize the clearances of McGath such that the first fitting clearance is in the range of 0.1-1mm, while the second, guiding fitting clearance is in the range of 0.01-.2mm, since such practice is a design consideration within the skill of the art. Although the applicant does not claim that the uppermost surfaces of the boards are shaped to abut in a gapless manner, the applicant's specification allows for the claims to be amended as such without the addition of new matter. Martensson teaches (figs.1-3) that the upper surfaces of boards should be shaped to abut in a gap-less manner in order to keep out dirt and water (col.1, 1.45 – col.2, 1.9). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to shape the upper surfaces of the McGath boards such that they abut in a gapless manner, for the purpose of keeping out dirt and water.

Claim 7. McGath discloses that the surfaces of the joint formed by the connection between the groove and tenon are provided with recesses (60, 62) so that cavities (cavities receiving 66, 66a) are formed in the joint.

Claims 8, 10, 11. McGath discloses that the boards are to be joined together to form a floor (col.11, 11.27-30). McGath does not disclose particleboard covered in decorative thermosetting laminate. Martensson teaches (col.3, 1115-25) that particleboard covered in thermosetting laminate is preferable for constructing floor boards since such construction is non-water- absorbing. Furthermore, it is well known that particleboard covered in thermosetting laminate is very economical. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the McGath boards to be particle board

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covered in thermosetting laminate, for the purpose of being non-water-absorbing and increasing economy.

Claim 9. McGath discloses that the surfaces of the joint formed by the connection between the groove and tenon are provided with recesses (60, 62) so that cavities (cavities receiving 66, 66a) are formed in the joint.

Claim 12. McGath discloses that the second guiding fitting clearance is proximate the board with respect to the first fitting clearance.

Claim 13. McGath discloses that the guiding wedges are arranged perpendicular to the extension of the joint.

Claim 14. McGath discloses that the first fitting clearance is formed between parallel surfaces of the tenon and groove.

Claim 15. McGath discloses (figs.3-5) a floor (col.11, ll.27-30) comprising: a first board (24a) in accordance with claim 6; a second board (24a'), joined to the first board at a joint; and glue (col.1, ll.26-28) disposed in the joint.

Claim 16. McGath discloses (col.11, ll.27-30) that the cavities are filled with glue.

Claim 17. McGath discloses (fig.3) a joint between first and second boards (24a, 24a'), the joint comprising: a guiding means (tenon and groove) at a joint between the two boards; the boards each comprising an upper surface (42a, 43) and a core (41); the guiding means on at least one (24a') of the boards comprising a groove (56); the second board (24a) comprising a tenon (57); the tenon and the groove includes a first fitting clearance (between tip of 57 and 56) bound by an upper surface of the tenon and an upper surface of the groove; and, wherein at least the groove includes a guiding wedge (58) so that a second, guiding fitting clearance (between 58 and

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48) is positioned between the guiding wedge and the upper surface of the tenon, whereby the first fitting clearance comprises a main part of a fit between the groove and tenon and the second guiding fitting clearance comprises a smaller part of the fit, provided that the first fitting clearance is larger than the second fitting clearance, wherein each of the boards further comprises a planar surface (planar contacting surfaces as seen in fig.4), and wherein the at least one guiding wedge comprises a distal tapered section (tapered section of 58 forming clearance) and a proximal section (section to left of 58 forming clearance) extending from the tapered section towards the core (core of 24a), and the planar surface of the at least one of the boards abuts a planar surface of the other adjacent board when the tenon of the board is mated with a groove of the adjacent board. It appears that the first fitting clearance is in the range of 0.1-1mm, while the second, guiding fitting clearance is in the range of 0.01-.2mm. However, McGath does not expressly disclose these dimensions. It has generally been recognized that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to optimize the clearances of McGath such that the first fitting clearance is in the range of 0.1-1mm, while the second, guiding fitting clearance is in the range of 0.01-.2mm, since such practice is a design consideration within the skill of the art. Although the applicant does not claim that the uppermost surfaces of the boards are shaped to abut in a gapless manner, the applicant's specification allows for the claims to be amended as such without the addition of new matter. Martensson teaches (figs.1-3) that the upper surfaces of boards should be shaped to abut in a gap-less manner in order to keep out dirt and water (col.1, 1.45 – col.2, 1.9). Therefore, it would

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have been obvious to one with ordinary skill in the art at the time the invention was made to shape the upper surfaces of the McGath boards such that they abut in a gapless manner, for the purpose of keeping out dirt and water.

Claim 18. McGath discloses that the surfaces of the joint formed by the connection between the groove and tenon are provided with recesses (60, 62) so that cavities (cavities receiving 66, 66a) are formed in the joint.

Claims 19, 21 and 22. McGath discloses that the boards are to be joined together to form a floor (col.11, ll.27-30). McGath does not disclose particleboard covered in decorative thermosetting laminate. Martensson teaches (col.3, ll15-25) that particleboard covered in thermosetting laminate is preferable for constructing floor boards since such construction is non-water- absorbing. Furthermore, it is well known that particleboard covered in thermosetting laminate is very economical. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the McGath boards to be particle board covered in thermosetting laminate, for the purpose of being non-water-absorbing and increasing economy.

Claim 20. McGath discloses that the surfaces of the joint formed by the connection between the groove and tenon are provided with recesses (60, 62) so that cavities (cavities receiving 66, 66a) are formed in the joint.

Claim 23. McGath discloses that the second guiding fitting clearance is proximate the board with respect to the first fitting clearance.

Claim 24. McGath discloses that the guiding wedges are arranged perpendicular to the extension of the joint.



Claim 26. McGath discloses that the proximal section extends from the tapered section to the core.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection; specifically the teaching of Martensson for removing gaps in the upper surface of connected boards as detailed in the rejections of claims 6 and 17 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

*VLM*

VLM

April 24, 2006

*Daniel P Stodola*

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